



PROJECTION

LANTERN and CINEMATOGRAPH

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LOOKING AHEAD.

ALTHOUGH it may seem a little early to refer to the lantern season, we should like, in this issue, to throw out a word of warning. For some time past we have been exceptionally busy designing and constructing new apparatus and accessories for the winter trade, with the result that we have secured quite a host of novelties for the lanternist and cinematographer. It would give us intense pleasure to be able to review these specialities fully in the present issue, but as certain members of the trade give so much attention to our products, we are compelled to postpone their introduction until the opening of the season. In the past we have made early announcements, and given particulars of our season's novelties, thereby hoping to assist the dealers, but on all such occasions we have invariably found our goods to be copied, in so far as outward appearance is concerned. Having, therefore, been the victims of this kind of "innocent coincidence," it makes us very reticent of showing our hand too early. We hope, therefore, that our friends, before being cajoled into placing their season's order, will at all events see what we have to offer. At present we are also busily engaged in compiling our 1906-7 catalogue, and we can assure our customers that it will far eclipse any of our previous efforts, but more of this anon. The editorial pen, we find, is apt to run away with the most studied résolve at secrecy.

**A New
Arc Lamp.**

After a considerable number of experiments, extending over several years, and at enormous cost, we have at last designed an Electric Arc Lamp which may be said to be perfect for cinematography, especially in large halls, or when a very high amperage is required. This introduction, which will be known as the No. 4 pattern, Fig. 1, is exceptionally massive and strongly built, so that it will stand any amount of really hard wear and tear. As will be seen from the illustration, it is mounted on a strong iron base which is 11 inches long, and which is fitted with iron handle and Russian iron tray.

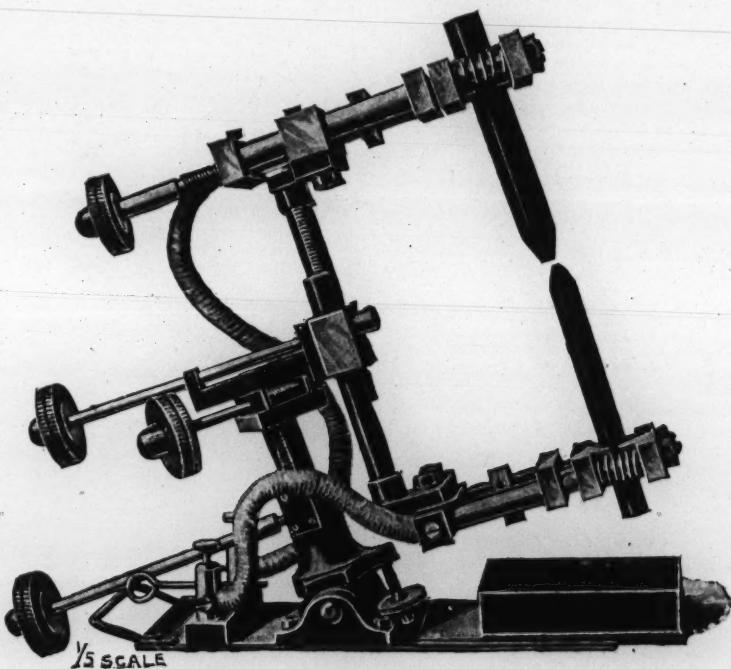


FIG. 1.

This tray slides within two grooves, and is intended for catching the carbon dust, or the hot used carbons, when it becomes necessary to change them. The body of the lamp is mounted on two stout bearings secured to the base, thus allowing the lamp to be tilted to any angle. The tilting movement is actuated by a "levelling" screw working on the base, thereby securing the most delicate adjustment. The body consists of a heavy upright and split casting, provided with clamping screw to take up the wear. An inner rod works up and down in this casting by rack and pinion, which allows for raising or lowering the lamp so as to make it suitable for varying optical centres. The top of the upright casting carries a turntable, worked by a worm gear, and thus gives a fine lateral movement. The turntable also carries a brass casting in which two rods, fitted with racks, move in a vertical plane, but in opposite directions, by the action of a single pinion. The top or "Positive" arm is very

strongly made and is firmly bolted to the upright. It consists of two stout parallel brass rods, carrying a strong bearing, which may be moved to and fro by a large central screw. By this means an even movement is assured, which is of considerable importance with illuminants of this kind. The carbon, which may be of any size up to 25 mm. diameter, is carried within V-cuttings in two metal blocks, between which there are two stout springs, as shown in Fig. 2. The blocks may be tightened or loosened by means of a screw, having a large knurled head, which is provided with holes around the

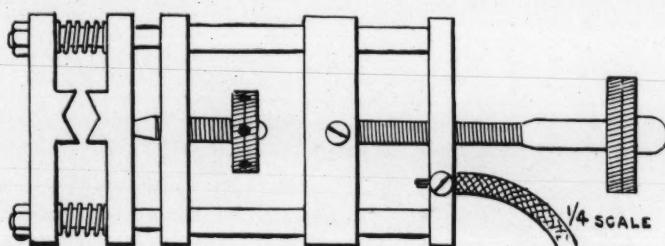


FIG. 2.

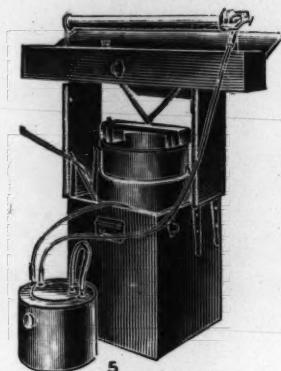
periphery. In this way the screw may be turned either way, even when the lamp is hot, by means of a steel "tommy," nail or bradawl. This is the most important feature of the lamp, and one that will appeal to every practical worker, for by this means the carbons may be changed in a few seconds, no matter how hot the lamp may be. There is absolutely no need to wait until the lamp cools down before it can be handled. The lower carbon arm is constructed on precisely the same principles as the "Positive" arm, in so far as the central screw motion is concerned for clamping the carbon in position. The No. 4 Electric Arc Lamp is beautifully made, and presents quite a handsome appearance. It is partly bronzed and lacquered, and partly polished and lacquered, and is insulated throughout with mica. It is fitted with the very best procurable asbestos covered wire leads, and with two massive terminals, mounted on a wood fibre block, which is firmly secured to the base. All the pinions are provided with large and massive wood fibre knurled handles which project outside the lantern body. The price of this new pattern lamp is £5 5s., and as we anticipate a large demand for them, we should recommend our friends to place their orders early so as to prevent disappointment. It embodies all the movements that can be embodied in a lamp of this description, and will be found to meet the requirements of the most critical cinematographer.

If you have not received a copy of our complete Art Catalogue of Lanterns and Cinematographs, we shall be pleased to forward you one on receipt of application.

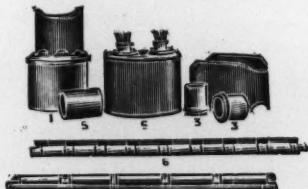
The Rilford

Reg'd

AUTOMATIC OXYGEN GENERATORS



**8.0002 UNPACKED:
[AND SET UP.**



**LAMPS AND
CARTRIDGE TUBES.**



**SHOWS HOW
SIMPLY IT WORKS.**

¶ The value of an absolutely reliable apparatus for automatically generating Oxygen is too obvious to require emphasizing. Electricity is not available everywhere—Oil and Acetylene are not powerful enough for Cinematograph and similar purposes. And, after all, what light is so soft, so pleasing, as Limelight?

¶ In the "Rilford" Oxygen Generator you have an apparatus which generates Oxygen just as required, and does this with certainty and safety. Moreover, the pressure is steady and the results, therefore, equally so. Everything is so simple that damages can be seen and repaired in any country.

¶ The utility of the apparatus, particularly in country districts and foreign lands, cannot be exaggerated.

¶ If house-gas is not available, it can be used in conjunction with the "Lawson" Ether Saturators, and becomes then a self-contained limelight outfit.

¶ One of the largest exhibitors took an outfit of this kind round the world, and exhibited Cinematograph films most successfully.

¶ The Generator is made in two patterns: No. 1 at £5 10 for ordinary work, No. 2 for Bi-unial and Cinematograph work at £6 10. Unfortunately the trade discount is small, but dealers who consider for a moment, will agree that it is wise to fix the price low enough to be within the reach of the average purchaser, even if it involves a sacrifice of profit. You secure a customer—that is the chief consideration.

¶ Each Generator has two Retorts; and Oxygen Cartridges are easily made in the apparatus provided.

¶ It is an apparatus which every dealer ought to stock—Those who do so appreciate its value.

Made by RILEY BROS LTD., Bradford, YORKS, obtainable from JOHN WRENCH & SON, 50, Gray's Inn Rd., LONDON,

Oxygen for Projection.

Amongst exhibitors, the most popular form of illuminant for the lantern and cinematograph, is unquestionably the oxy-hydrogen light. Whilst this is so, there are certain difficulties, especially in rural districts and in foreign lands, in procuring compressed gas as and when required. Orders must be given either well in advance, or the risk must be taken of railway delays. In any case the carriage becomes a serious item, especially if a number of exhibitions are given. We believe that lantern entertainments would be far more popular in such places if a simple and cheap means of making oxygen were better known. The "Rilford" Automatic Oxygen Generator fills the breach, for it generates the gas just as required, and does the work with certainty and safety, giving a steady pressure. Some people seem to imagine that the manufacture of oxygen requires a more or less scientific training, and that the process must of necessity be difficult and intricate. With the "Rilford" Generator it is just the reverse; the apparatus works automatically, and may be used by the veriest tyro with entire satisfaction. The price is another item which claims the attention, the smaller size, suitable for ordinary work, only retailing at £5 10s. The large size, suitable for bi-unials and cinematographs, is £6 10s. It will therefore be seen that the apparatus soon pays for itself, when the cost of gas and carriage is taken into consideration. We feel convinced that if all our friends could see their way to stock but one generator, they would appreciate its value, and find that it only required to be shown in order to secure a customer. They may be obtained through ourselves, or direct from the well-known manufacturers, Riley Bros., Ltd., Bradford, Yorkshire.

* * *

DON'T attempt the lantern trade without a representative stock of apparatus and accessories, otherwise failure is imminent.

* * *

DON'T prate of the severity of competition you are called upon to meet. The most successful men are they who, having entered the race, make up their minds to succeed, and select the lines of least resistance.

* * *

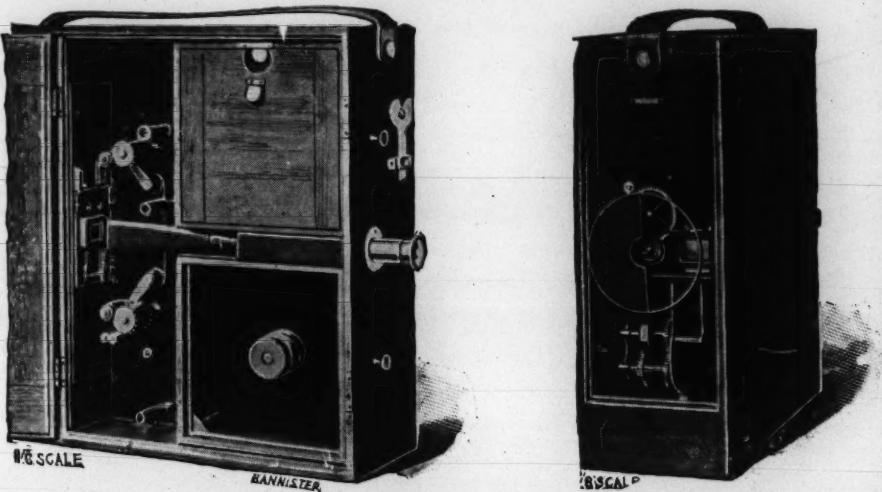
DON'T undertake either a Lantern or Cinematograph exhibition in public, until you are thoroughly *au fait* with all your apparatus, or you will have endless worry and annoyance.

* * *

DON'T be too conservative: remember that we live in a progressive age, and must of necessity be constantly advancing to keep pace with the times.

MODEL "D"**Cinematograph Camera**

The most Up-to-date Instrument in the Market
for taking Animated Pictures.



Made of best materials throughout. Fitted with nickel plated direct focussing tube. Film Punch fitted to side for marking the film between the incidents taken. Automatic Gauge for registering number of feet of film exposed. Automatic Speed Indicator. Focussing tube fitted at back which passes right through the interior of the Camera. Intermittent movement on pin-clutch principle. Adjustable Focal Plane Shutter, Improved Film Boxes holding 350 feet of film

Price - £20

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Embodying every movement necessary for the Modern Cinematographer.

Price

With Mechanical Tilting Table and Revolving Head	-	-	-	-	£10 10 0
With Revolving Head only	-	-	-	-	8 8 0

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The Making of Cinematograph Film at Whetstone.

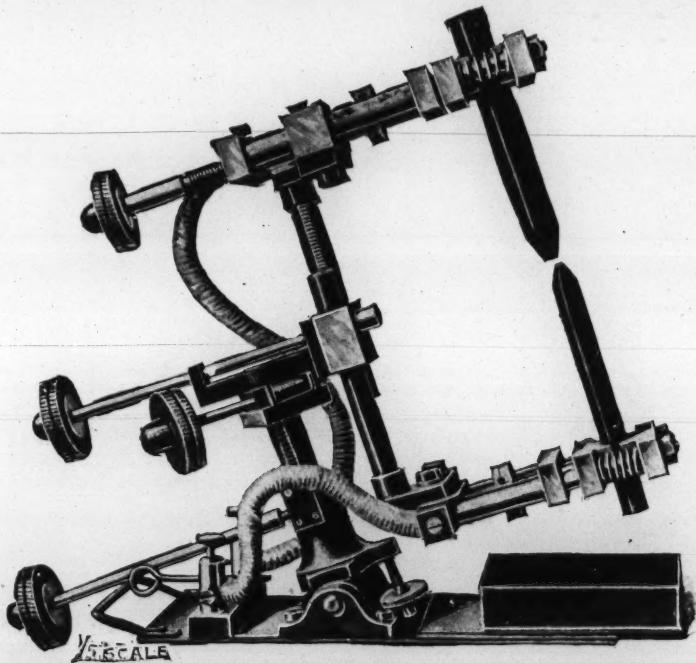
WHETSTONE, about nine miles north of the metropolis, is best known to the cinematographic fraternity as the home of the Whetstone Photographic Works, the proprietor being Mr. Birt Acres. Here, cinematograph film is made by the mile, and the output is constantly increasing. It would be difficult to find a more versatile manufacturer than Mr. Acres; his wide experience and practical knowledge is of the greatest value to him, for he is not only a scientist, but also an engineer, inventor and a practical man of business.

The works are pleasantly situated, and are equipped throughout with the most modern machinery, the bulk of it being made on the premises. In fact, this remark applies to all the intricate machines used in making the film. When Mr. Acres first commenced to make cinematograph film, about ten years ago, it was coated in single widths of 1 $\frac{1}{8}$ ins. wide. Finding this more or less unsatisfactory, he made a machine for coating it in 3 in. widths, but as the demand began to increase, another machine was constructed for coating film 8 ins. wide. The last machine to be designed, and the one in use at the present time, coats film 22 ins. wide, and works at the rate of 25 feet per minute. From the above facts, it will be seen that Mr. Acres moves with the times, and is not slow in making improvements when the occasion arises. He has also devised an ingenious method of drying the film, which, of course, is one of the most delicate operations in its manufacture. In addition to the above, special slitting machines have been designed and built for cutting the film in lengths. These work with absolute accuracy, but this result has only been attained after years of careful thought and experiment. Mr. Acres' motto is "efficiency," and no trouble or expense is too great in order to attain this result. He was one of the first to see the immense possibilities of the cinematograph, and as far back as 1895 he designed what was considered the first practical machine for projecting animated pictures. One of the pioneers of cinematography, he has been, either in one way or another, actively associated with its progress ever since, and it is this thoroughly practical experience which makes his products excel to-day. His business is continually increasing, and the Whetstone Film gives entire satisfaction wherever it is used.

EUREKA

AN ELECTRIC ARC LAMP AT LAST

which is **REALLY** satisfactory



Carbons may be changed when lamp is hot

Extreme Range of all Adjustments
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Lateral, Striking, and Positive
Carbon Movements. All mechani-
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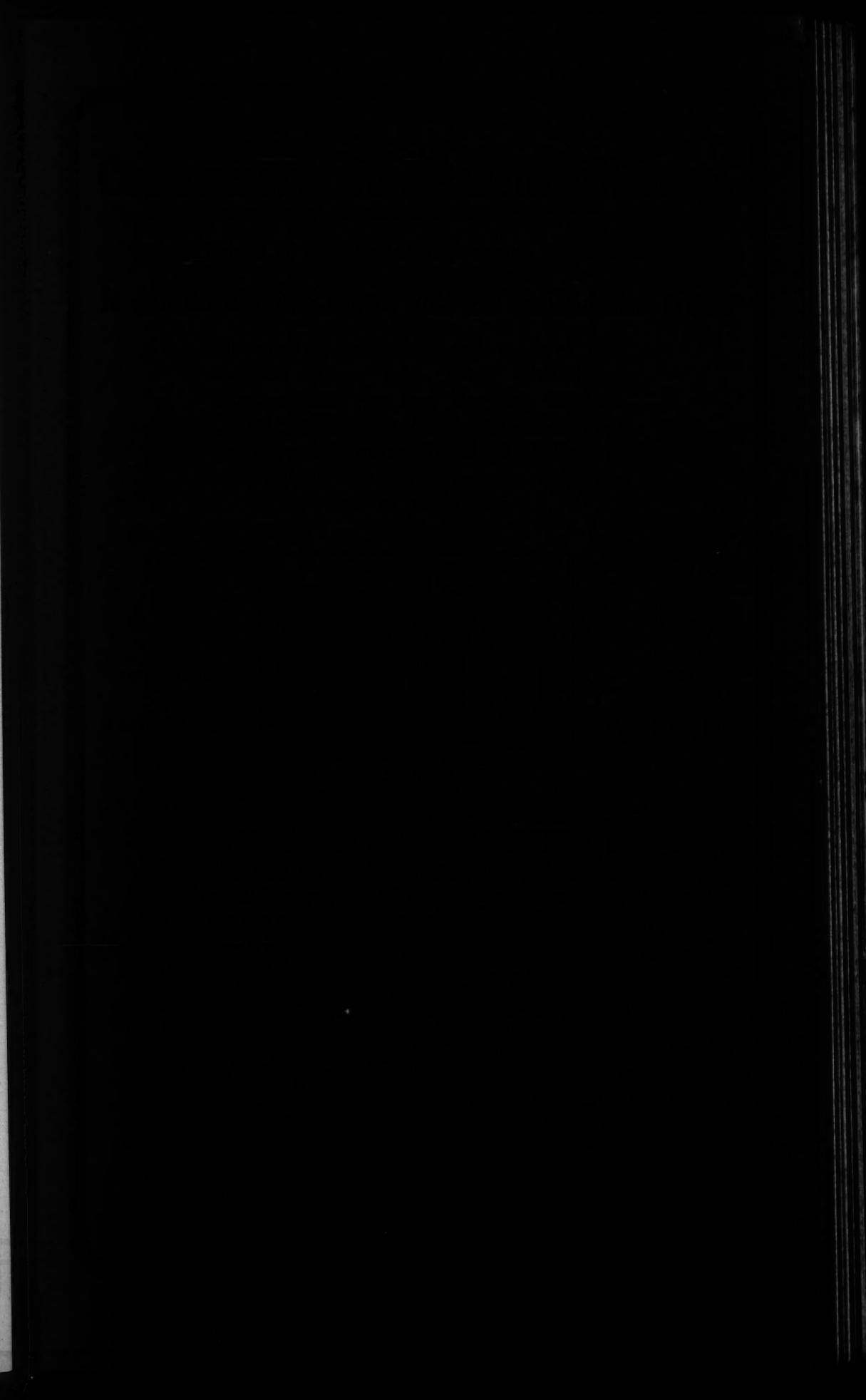
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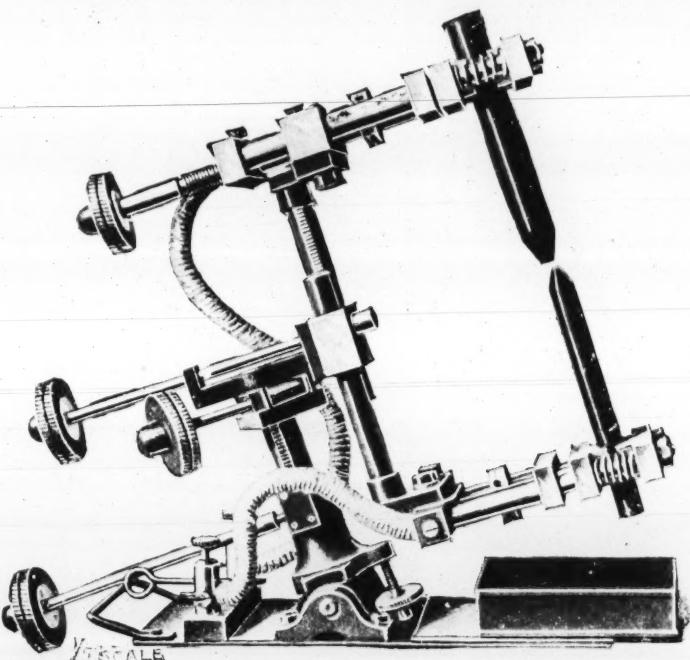
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